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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/642,717	08/18/2003	William S. Rollins III	WSR001US	4383
32047	7590	05/13/2005	EXAMINER	
GROSSMAN, TUCKER, PERREAULT & PFLEGER, PLLC 55 SOUTH COMMERICAL STREET MANCHESTER, NH 03101			CASAREGOLA, LOUIS J	
			ART UNIT	PAPER NUMBER
			3746	

DATE MAILED: 05/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/642,717

Applicant(s)

ROLLINS, WILLIAM S.

Examiner

Louis J. Casaregola

Art Unit

3746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 3/10/05.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) 11-15 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8-9 is/are allowed.
- 6) ☒ Claim(s) 1-7,10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Election

Applicant's election of the invention of Group I, claims 1-10, and the species of Figure 9 is acknowledged. Applicant has listed all of claims 1-10 as readable on the elected species, and an action on the merits of these claims is set forth below. Non-elected claims 11-15 are withdrawn from further consideration.

Objections To Claims

Claim 3 is objected to under 37 CFR 1.75(a) for the following reason:

Claim 3, line 1, makes reference to "said ST extraction steam". The antecedent for this expression is introduced in claim 2, but claim 3 depends from claim 1. Claim 3 therefore includes a dependency error – it should depend from claim 2 rather than claim 1.

Claim Rejections - 35 USC 102

Claims 1, 4, 5 and 7 are rejected under 35 USC 102(b) as being anticipated by Wilson et al (GE Publication GER-2229N).

The claimed combined cycle power plant reads on a series of power plant combinations disclosed in the GE Publication. Pages 14 and 15 of this publication

include tables listing a number of specific gas turbines along with parameters for heat recovery steam turbine systems suitable for combination with the gas turbines. Gas and steam turbine rated power outputs are tabulated, and the ratio of steam turbine to gas turbine power output (ST/GT) can thus be calculated. The steam boilers used may be single pressure systems as indicated in the table footnote. Moreover, for the MS3002, MS5001 and MS5002 Gas Turbines using supplementary fired boilers, Wilson lists numerous examples (marked in red) having an ST/GT ratio greater than 0.75 as specified in the present claims. Note also that claimed reference to steam generator firing as "substantially continuous" merely describes an operating mode for applicant's power plant apparatus, and the equivalent plant apparatus described by Wilson must be presumed equally capable of operating in this manner.

Claims 5 and 7 make further references to maintaining combined cycle efficiency, maintaining steam turbine generator output, optimizing supplementary firing, etc. This material merely describes desired results, and if the power plant apparatus broadly recited in the present claims can achieve such results, then so can the equivalent apparatus described by Wilson.

Claim 10 is rejected under 35 USC 102(b) as being anticipated by Pacault et al.

The claimed combined cycle power plant reads on conventional power plants of the type disclosed by Pacault. Attention is called to Pacault's Figure 1; note gas turbine 3, steam turbines 11 and 14, heat recovery steam generator 1, supplemental firing unit 30, and feedwater heating sections 27 and 29. Note also that feedwater valve 28

corresponds to the broadly claimed "control for controlling feedwater flowing through feedwater heating sections" (claim 10, lines 9-10).

Claim Rejections - 35 USC 103

Claims 2 and 3 are rejected under 35 USC 103(a) as being unpatentable over Wilson et al in view of Pacault et al.

While Wilson does not disclose specific details of the steam turbines used in the various listed systems, steam extraction type feedwater heating is a conventional steam turbine feature as shown, for example, by Pacault; see Figure 1, elements 44-46. The inclusion of such a feature in any of Wilson's steam turbine systems would have thus been an obvious expedient for improving thermodynamic efficiency.

Claim 6 is rejected under 35 USC 103(a) as being unpatentable over Wilson et al in view of the Industrial Gas Turbine Handbook.

The "cogeneration" or "CHP" (combined heat and power) feature in claim 6 constitutes a power plant arrangement for supplying steam to a heat consumer outside the plant itself. This is a well known feature as shown, for example, by the Industrial Gas Turbine Handbook. Note that pages 64-65 of the Handbook list a number of combined cycle power plants (indicated in red), which are similar to those in Wilson and also include a provision for supplying steam for district heating. It would have been obvious

to combine such a feature with any of Wilson's power plant systems for the purpose of utilizing excess steam capacity and/or expanding plant flexibility to encompass further useful functions.


Allowable Subject Matter

Claims 8 and 9 are allowed.

Additional References

Wylle is cited as disclosing a further pertinent example of a combined cycle power plant having an St/GT ratio in the same range as claimed; see Figure 2.

L. J. Casaregola
571-272-4826 (M-F; 7:30-4:00)
703-872-9306 FAX
May 9, 2005


LOUIS J. CASAREGOLA
PRIMARY EXAMINER

If repeated attempts to reach the examiner by telephone are unsuccessful, the art unit supervisor, Cheryl Tyler, can be reached at 571-272-4834.

Information regarding the status of this application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR, and status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).